

# **Trip Report 2003 Annual Inspection of Site A/Plot M, Cook County, Illinois, Decontamination and Decommissioning Program Site**

## **Summary**

Site A/Plot M was inspected on March 13, 2003. The site, located within a county forest preserve with significant tree and grass cover, is in good condition. Monuments have been vandalized, as noted during previous inspections, and erosion was observed at Plot M. There is no requirement for a follow-up inspection.

## **1.0 Introduction**

This report presents the results of the annual U.S. Department of Energy (DOE) inspection of Site A/Plot M at the Palos Forest Preserve in Cook County, Illinois. Features and photograph locations (PLs) discussed in this report are shown on the attached figure.

T. G. Kirkpatrick (Chief Inspector) and M. R. Reed (Assistant Inspector), both of S.M. Stoller Corporation, the Technical Assistance Contractor at the DOE Grand Junction Office (GJO), conducted the inspection on March 13, 2003. Norbert Golchert of Argonne National Laboratory (ANL) provided a site orientation during the inspection.

The purposes of the inspection were to confirm the integrity of the disposal facility, to evaluate the condition of the monuments, and to examine the condition of DOE monitor wells.

Inspectors drove to Site A, walked to the center of the area, and examined the monument and some of the monitor wells. The team walked the perimeter roads of Site A inspecting monitor wells and observing the general condition of the site. Next, the team drove to the junction with the road leading to Plot M. Because the road to Plot M is steep and was covered in ice, inspectors walked to that location. Careful examination of all monitor wells was not necessary because ANL personnel visit the wells for sampling on a regular basis and perform required maintenance.

The following points describe the site:

1. Site A contains two buried nuclear reactor shells and buried debris from the various support buildings associated with the reactors and other laboratory operations. The site occupies roughly 19 acres. The only structures visible are the stone monument marking the site, occasional concrete flatwork and fence post collars, and a section of the original chain link fence. The site surface is returning to its "natural state."
2. Plot M was a series of trenches used for the burial of radioactive wastes. Plot M is less than 1 acre in area. A granite monument and six boundary monuments mark the site, which consists of a mounded earth cover planted in grass, placed over a concrete cap.

3. More than 50 wells and boreholes are present at Site A/Plot M.

## 2.0 Inspection Results

The surface of Plot M and portions of Site A exist as clearings in the hardwood forest. The remainder of Site A is also becoming forested.

A subset of the currently active monitor wells and boreholes was inspected. All wells and boreholes inspected are in good condition. Minor vandalism, such as the graffiti on the Site A and Plot M monuments, continues.

Erosion was noted along the paths crossing Plot M between the monument and the north, south, and west sides of the site (PL-1 and PL-2). The cell is not yet threatened but erosion is approximately one foot deep and the earth cover over the concrete cap is only two feet thick. Although erosion does not appear to have increased appreciably during the past year, the LTSM Program should consider controlling measures to reduce the likelihood of the concrete cap becoming exposed. The ANL representative requested the Palos Forest Preserve District repair the erosion in 2002 but the work had not been conducted.

The attached drawing depicts most of the active monitoring locations for Site A/Plot M, as established with a global positioning system unit in 1999.

## 3.0 Recommendations

Erosion has occurred along the paths crossing Plot M.

**Recommendation:** Enough traffic passes over these paths to preclude successfully repairing the erosion by filling the depression with soil and reseeding. Therefore, inspectors recommend placing crushed rock in the depression mixed with soil, and reseeding. A letter should be written to the Palos Forest Preserve District requesting them to repair the erosion.

## 4.0 Photographs

Photograph Location Number	Azimuth	Photograph Description
PL-1	75	Norbert Golchert and Mark Reed inspecting erosion on Plot M.
PL-2	270	Mark Reed inspecting erosion trail on Plot M.



SAM 03/2003. PL-1. Norbert Golchert and Mark Reed inspecting erosion on Plot M.



SAM 03/2003. PL-2. Mark Reed inspecting erosion trail on Plot M.

